## Climate Change at the Federal Level

#### Victor B. Flatt

Tom & Elizabeth Taft Distinguished Professor of Environmental Law; Director, Center for Law Environment, Adaptation, and Resources; Distinguished Scholar of Carbon Markets and Carbon Trading, Global Energy Management Institute, University of Houston Bauer College of Business

CLEAR - www.law.unc.edu/centers/CLEAR

### Overview

- Major Provisions of key climate change legislative proposals
- Impact on State and Regional Systems
- Prognostication federal level
- Plan B EPA Regulation
- Prognostication International (Copenhagen and beyond)

## Federal Legislation

- Current Templates:
  - ACES Waxman-Markey (House)
  - Boxer-Kerry (Senate)
- Formula to Reduce Cap and Trade
- Legislation addresses:
  - Cap and how allocated
  - Safety valve/Price Control within trading system
  - Direct Energy and Efficiency Regulation
  - "Adaptation" provisions and funding
  - Relationship with International Questions

# Federal Legislation

- Cap:
  - ACES 17% from 2005 by 2020
  - Boxer-Kerry 20% from 2005 by 2020
  - Both 83% reduction by 2050
  - Important in International Negotiations

### CAP from 2012-2050

			2031	3,408
2012	4,627		2032	3,283
2013	4,544			-
2014	5,099 *INC COVERAGE		2033	3,158
2015	5,003		2034	3,033
2016	5,482*INC COVERAGE		2035	2,908
2017	5,375		2036	2,784
2018	5,269		2037	2,659
2019	5,162		2038	2,534
2020	5,056		2039	2,409
2021	4,903		2040	2,284
2022	4,751		2041	2,159
2023	4,599		2042	2,034
2024	4,446		2043	1,910
2025	4,294		2044	1,785
2026	4,142		2045	1,660
2027	3,990		2046	1,535
2028	3,837		2047	1,410
2029	3,685		2048	1,285
2030	3,533		2049	1,160
		Ш	2047	1,100

### ACES - how allocated

- 15 % auctioned per year
- Initially, other percentage given away
- Approx. 59% to industry; 25% for needs/interest of public- adaptation, enviro, etc...

### **ACES - Allocation**

#### 35% for electric utility sector;

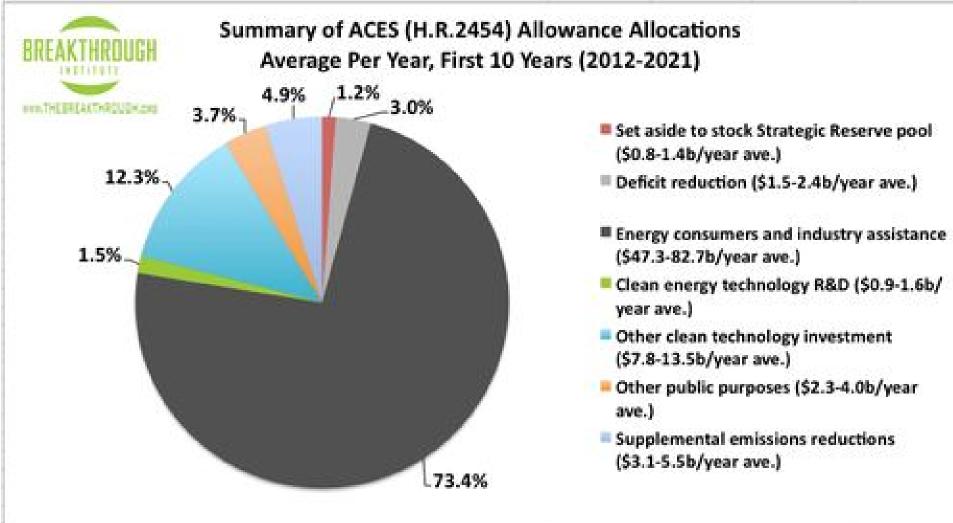
- Last version gives percentage to rural electric cooperatives; fight over allocation
- 15% for carbon-intensive industries, such as steel and cement, in 2014 (reduced by 2% every year)
- 9% for local natural gas distribution companies, in 2016 (reduced to zero between 2026 and 2030)
- 3% for automakers toward advanced technologies through 2017 (reduced to 1% from 2018 and 2025)
- 2% for oil refineries from 2014 to 2026
- 2% for carbon capture and storage technology from 2014 to 2017 (increases to 5% after 2018)

### **ACES - Allocation**

#### To states and other funds:

- 10% for states for renewable energy and efficiency investment from 2012 to 2015 (reduced to 5% between 2016 to 2022)
- 5% for tropical deforestation prevention projects
- 2% for domestic adaptation to climate change between 2012 and 2021 (increases to 4% between 2022 to 2026, to 8% in 2027)
- 2% for international adaptation and clean technology transfer from 2012 to 2021 (increases to 4% between 2022 to 2026, to 8% in 2027)
- 1.5% for programs helping home heating oil and propane users (reduced to zero between 2026 and 2030)
- 1% for Clean Energy Innovation Centers for R&D funding
- 0.5% for job training from 2012 to 2021 (increases to 1% after 2022)

### ACES breakdown – Boxer-Kerry similar



## ACES – Allocation – Economic Impact

- -Under Current distribution formula Southern States in middle on electric power cost impact
- -Gasoline Cost national market
  - -8-12 cents a gallon pass through
- -Harder for Electricity Suppliers than Petroleum
  - -\$8-30 per month electric (reduction in Pacific Northwest)

# Renewable Electricity Standards

- Percentage
  - 6-20% in ACES to 2020
  - Boxer Kerry similar but could change
- Qualifies
  - ACES Wind, solar, geothermal, certain biogas and biofuels, "qualified" hydropower, marine and hydrokinetic energy – gubernatorial waiver provision for increasing energy efficiency
- Pre-emption
  - ACES floor pre-emption

# National Cap and Trade System— Preemption of State Programs

- First Five years
- Boxer- Kerry (9 month delay)
- Pre-emption of RGGI as well
- Some play and compromise

# Additional Big Issues

- Offsets
- Revenue
- Targets revisited

# Prognostication

- 2010
- Driven by EPA regulation
- Close on targets
- Funding for states in pre-emption
- Offsets maybe international agreement?

# **EPA Regulation**

- Original final endangerment finding-March 2010
  - Moved up last week message to Copenhagen
- Regulate under Performance Stds.
  - Exemption of small sources problematic
- NAAQS possible difficulty
- Trading Preferred
- Offsets possible

## International - Copenhagen

- Big Issues
  - Binding Targets by Developing Countries
  - □ Financial Assistance Transfer
    - Adaptation
    - Other "Losers"
- Anyone's Guess how will End
  - New agreement
  - Framework for moving forward
  - Role of US